

Search Request Form

Scientific and Technical Information Center

Requester's Full Name: L. Eric Crane Examiner #: 65753 Date: 07/30/02
 Art Unit: 1623 Phone Number: 308-4639 Serial No. 09/743,745.
Mail Box & Bldg/Room Loc: 8D-14/CM-1 **Results Format Preferred:** PAPER
[8B-19/CM-1]

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, key words, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and/or abstract..

Title of Invention: See attached copy of claims.
Inventors (please provide full names): See attached copy of claims.
Earliest Priority Filing Date: 07/13/98

**For Sequence Searches only* Please include all of the pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for the compound of Figure 5 (TBDMS = tertiarybutyldimethylsilyl) and for methods of analysis by mass spectrometry using said compound.

STAFF USE ONLY

	Type of Search	Vendors/cost as applicable
Searcher: _____	NA Sequence(#) _____	STN _____
Searcher Phone #: _____	AA Sequence(#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Link _____
Date Completed: _____	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Full Text _____	Seq.Syst'ms _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other(Specify) _____

WEST Search History

DATE: Wednesday, September 24, 2003

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>			
L5	L4 and polyether	12	L5
L4	L3 and (nucleotide or oligonucleotide)	121	L4
L3	L1 and mass	129	L3
L2	L1 and mass marker	0	L2
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L1	((536/26.1 536/26.6)!.CCLS.)	318	L1

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 13:19:16 ON 24 SEP 2003)

FILE 'REGISTRY' ENTERED AT 13:19:25 ON 24 SEP 2003

L1 STRUCTURE UPLOADED

L2 48 S L1 SSS SAM

L3 686 S L1 SSS FULL

FILE 'CAPLUS, USPATFULL' ENTERED AT 13:20:43 ON 24 SEP 2003

L4 177 S L3

L4 ANSWER 167 OF 177 USPATFULL on STN
 ACCESSION NUMBER: 95:31961 USPATFULL
 TITLE: 2',5'-phosphorothioate oligoadenylates and their
 covalent conjugates with polylysine
 INVENTOR(S): Suhadolnik, Robert J., Roslyn, PA, United States
 Pfleiderer, Wolfgang, Constance, Germany, Federal
 Republic of
 PATENT ASSIGNEE(S): Temple University of the Commonwealth System of Higher
 Education, Philadelphia, PA, United States (U.S.
 corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5405939		19950411
APPLICATION INFO.:	US 1992-915771		19920716 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1990-499118, filed on 26 Mar 1990, now abandoned which is a continuation of Ser. No. US 1987-112591, filed on 22 Oct 1987, now patented, Pat. No. US 4924624		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Rollins, John W.		
ASSISTANT EXAMINER:	Crane, L. Eric		
LEGAL REPRESENTATIVE:	Seidel, Gonda, Lavorgna & Monaco		
NUMBER OF CLAIMS:	3		
EXEMPLARY CLAIM:	1,2		
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)		
LINE COUNT:	1500		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Optically active compounds of the formula ##STR1## wherein n is 1 or 2
 and m is 0, 1, 2 or 3 have antiviral activity. Compounds of the formula
 wherein at least one of the internucleotide phosphorothioate linkages is
 of the Sp configuration possess increased antiviral activity and/or
 metabolic stability.

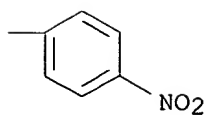
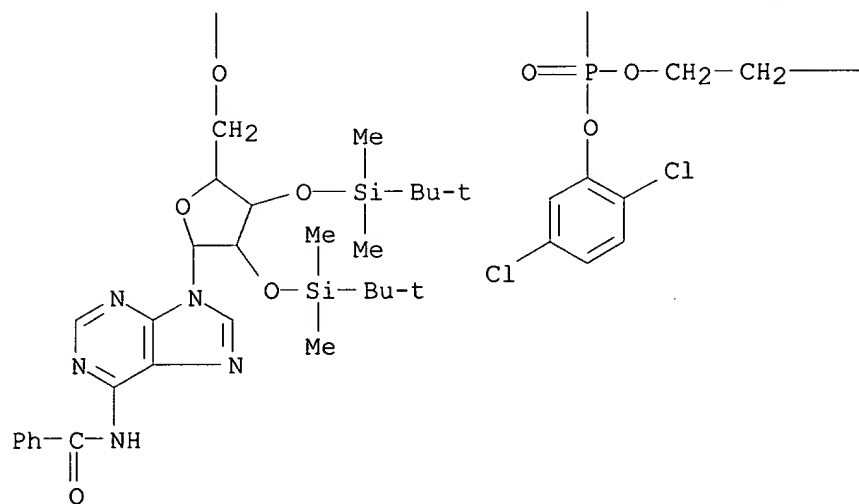
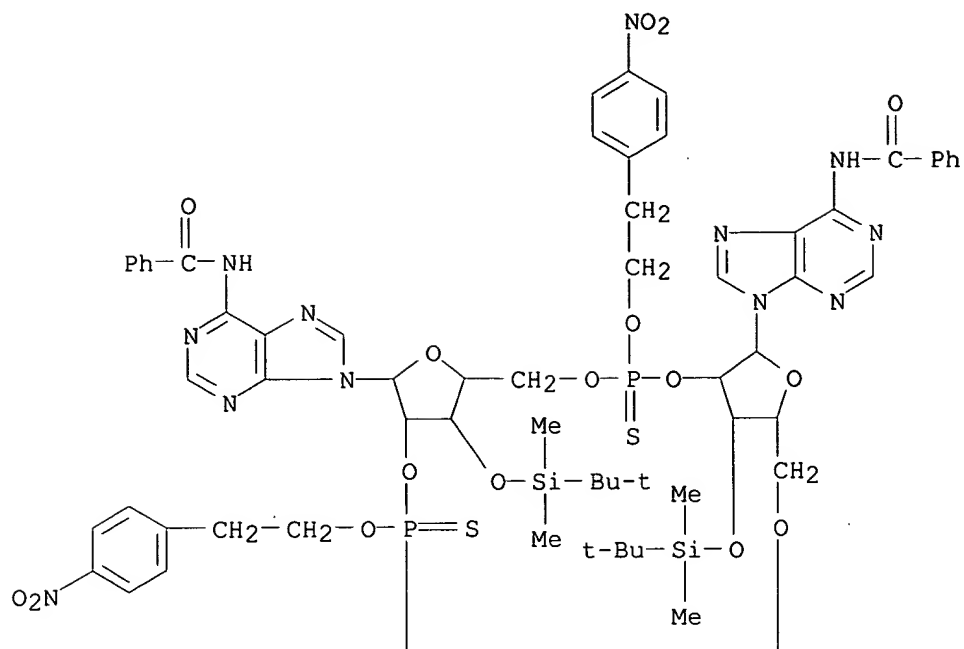
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 110356-00-8P 110415-98-0P 110415-99-1P
 110416-00-7P

(prepn. of, as virucide)

RN 110356-00-8 USPATFULL

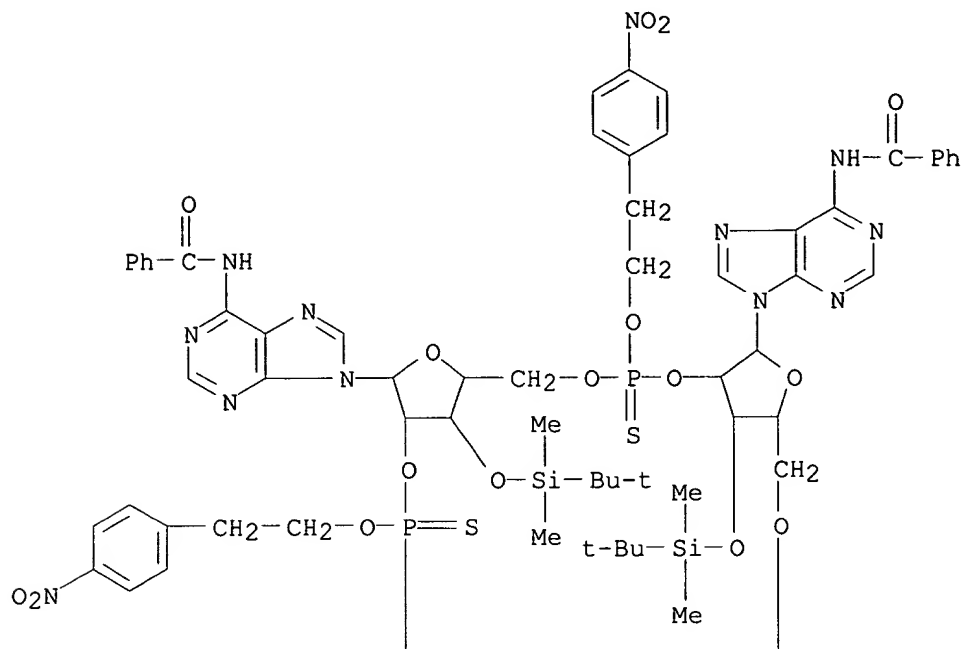
CN Adenosine, [P(R)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-
 nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-
 P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(R)]-N-
 benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-
 nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-
 [(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)



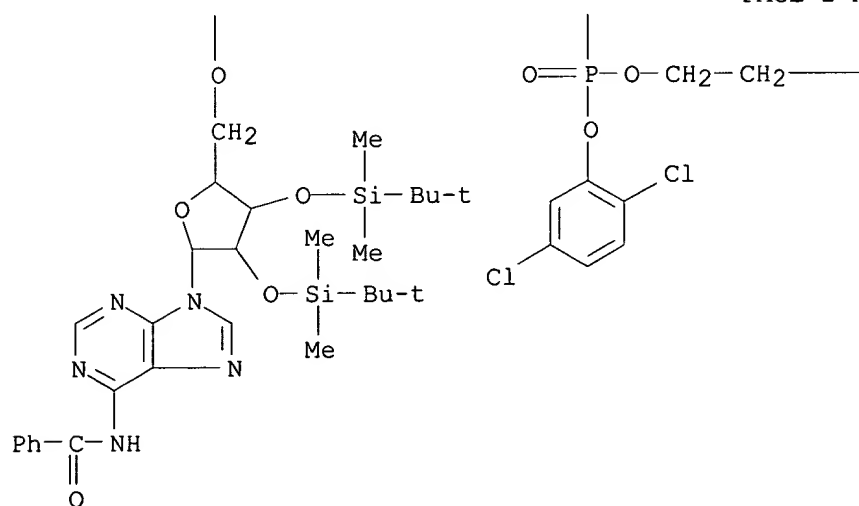
RN 110415-98-0 USPATFULL
 CN Adenosine, [P(S)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-

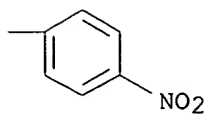
P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(R)]-N-benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



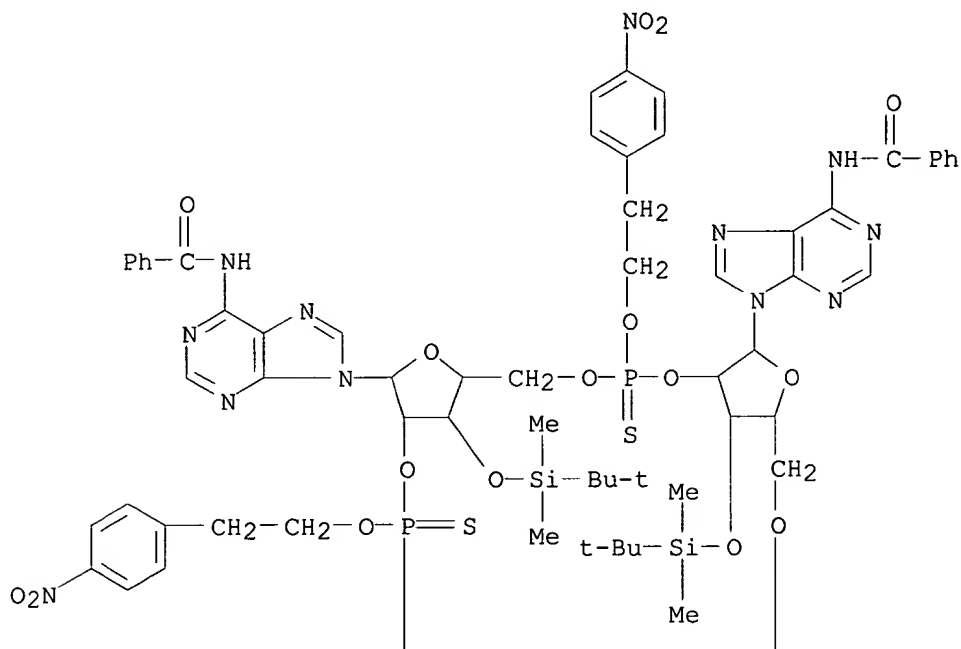
PAGE 2-A

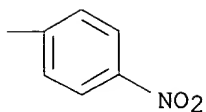
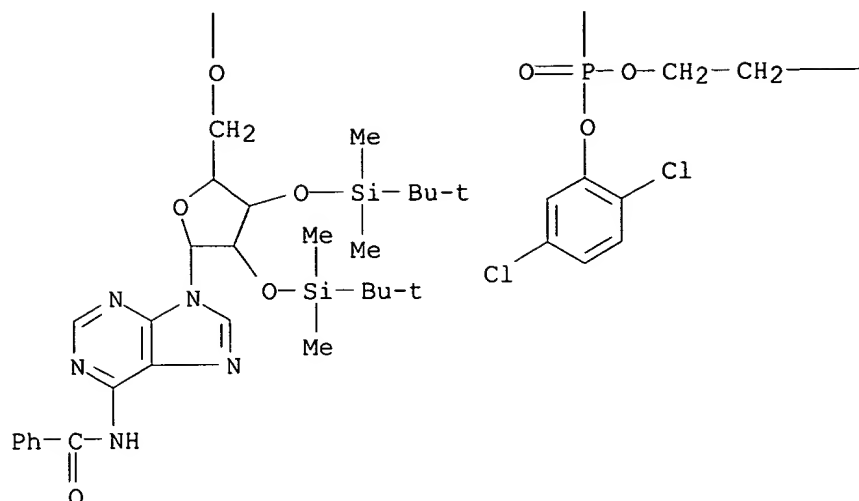




RN 110415-99-1 USPATFULL

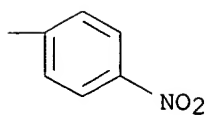
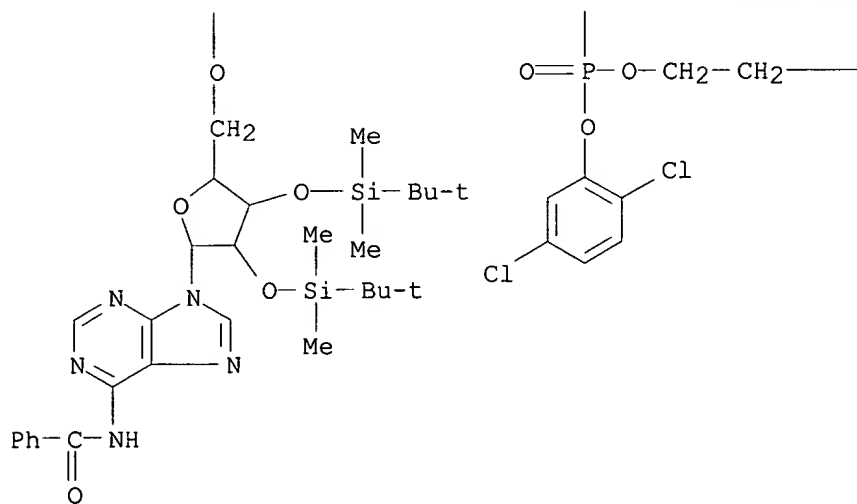
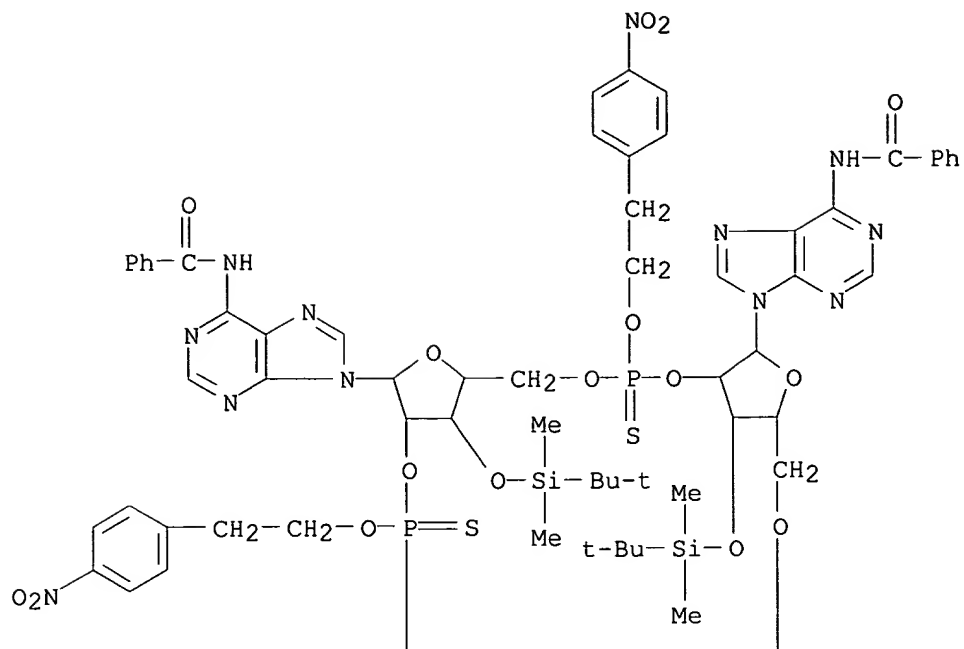
CN Adenosine, [P(R)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(S)]-N-benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)





RN 110416-00-7 USPATFULL

CN Adenosine, [P(S)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(S)]-N-benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)



TITLE: Encapsulated 2',5'-phosphorothioate oligoadenylates
 INVENTOR(S): Suhadolnik, Robert J., Roslyn, PA, United States
 Pfleiderer, Wolfgang, Constance, Germany, Federal
 Republic of
 PATENT ASSIGNEE(S): Temple University of the Commonwealth System of Higher
 Education, Philadelphia, PA, United States (U.S.
 corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5188897		19930223
APPLICATION INFO.:	US 1990-499109		19900326 (7)
DISCLAIMER DATE:	20070518		
RELATED APPLN. INFO.:	Division of Ser. No. US 1987-112591, filed on 27 Oct 1987, now patented, Pat. No. US 4924624		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Brown, Johnnie R.		
ASSISTANT EXAMINER:	Crane, L. Eric		
LEGAL REPRESENTATIVE:	Seidel, Gonda, Lavorgna & Monaco		
NUMBER OF CLAIMS:	27		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)		
LINE COUNT:	1490		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Optically active compounds of the formula ##STR1## wherein n is 1 or 2
 and m is 0, 1, 2 or 3 have antiviral activity. Compounds of the formula
 wherein at least one of the internucleotide phosphorothioate linkages is

REFERENCE TO GOVERNMENT GRANT

The invention described herein was made, in part, in the course of work
 supported by National Institutes of Health grant PO1 CA-29545 and
 National Science Foundation grant DMB84-15002.

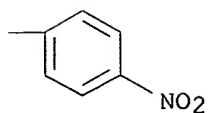
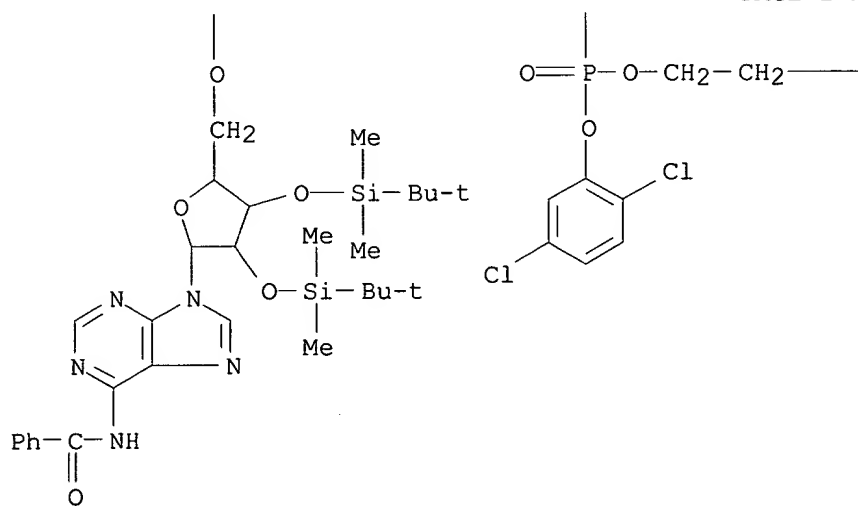
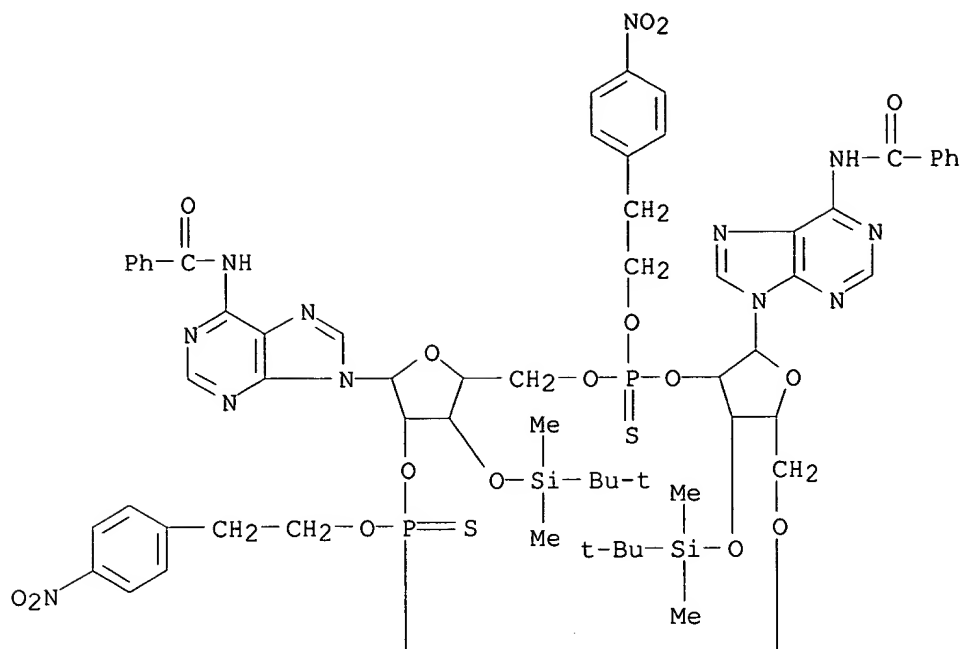
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 110356-00-8P 110415-98-0P 110415-99-1P
 110416-00-7P

(prepn. of, as virucide)

RN 110356-00-8 USPATFULL

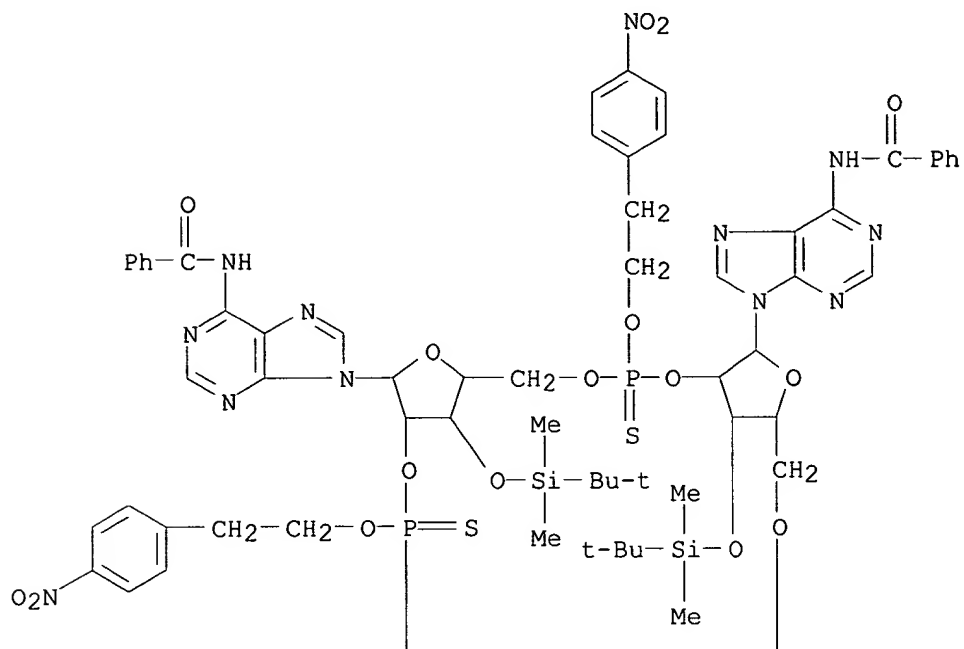
CN Adenosine, [P(R)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-
 nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-
 P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(R)]-N-
 benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-
 nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-
 [(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)



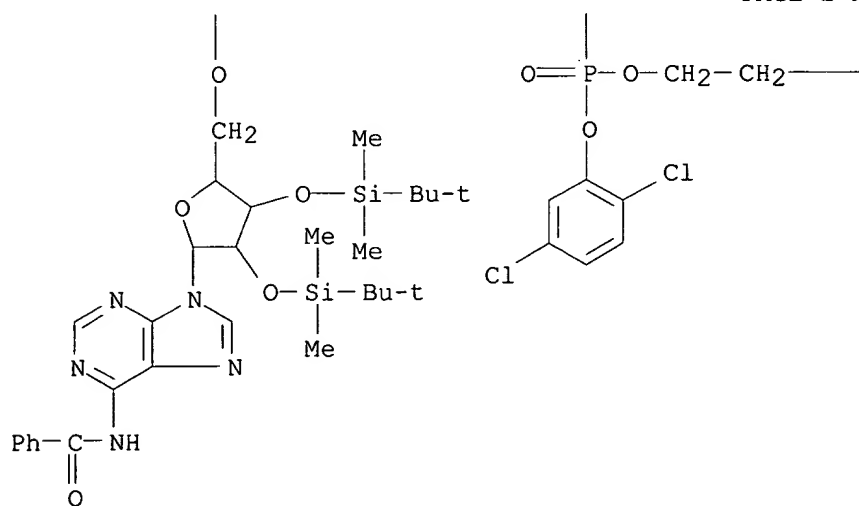
RN 110415-98-0 USPATFULL
 CN Adenosine, [P(S)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-

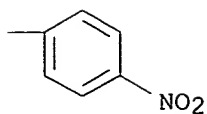
P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(R)]-N-benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

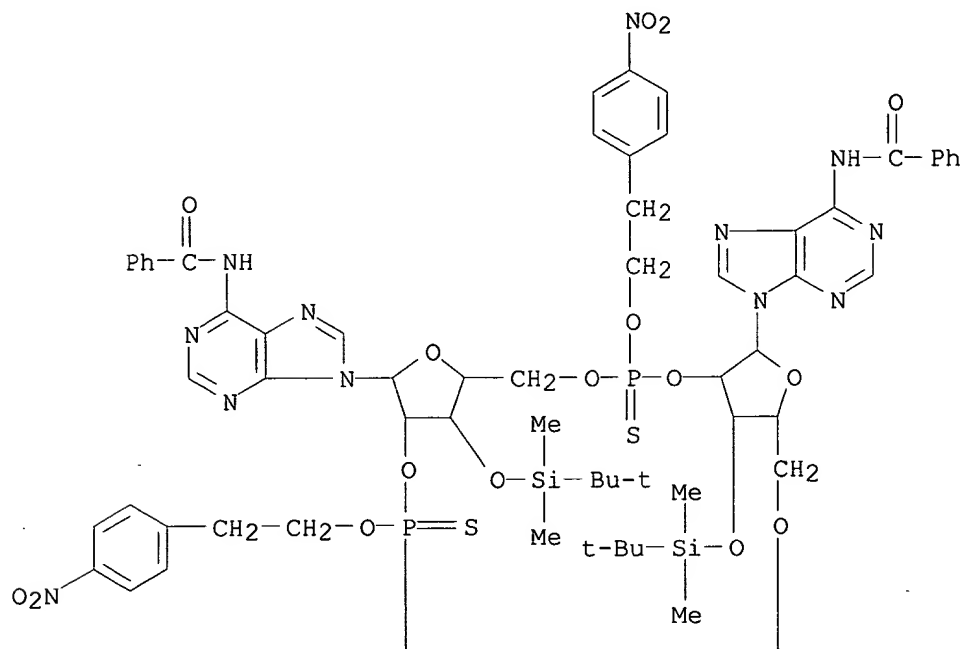


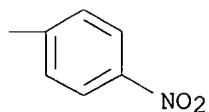
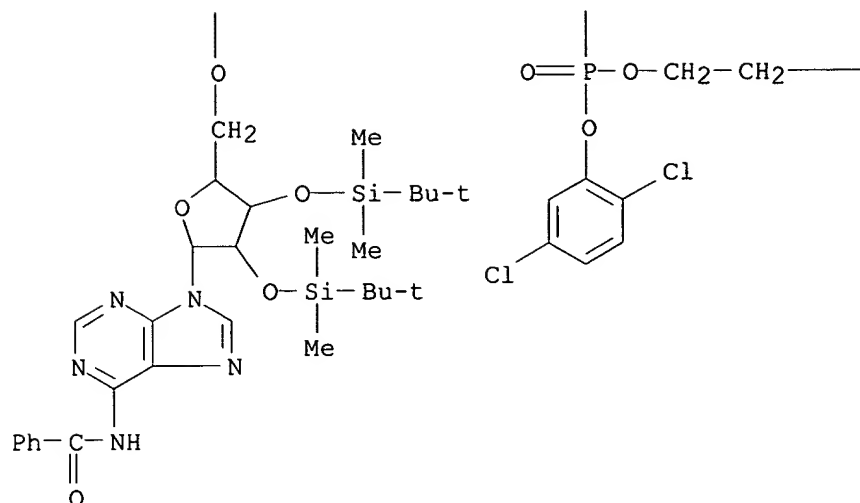


RN 110415-99-1 USPATFULL

CN Adenosine, [P(R)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(S)]-N-benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)

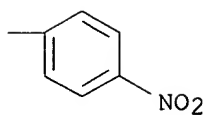
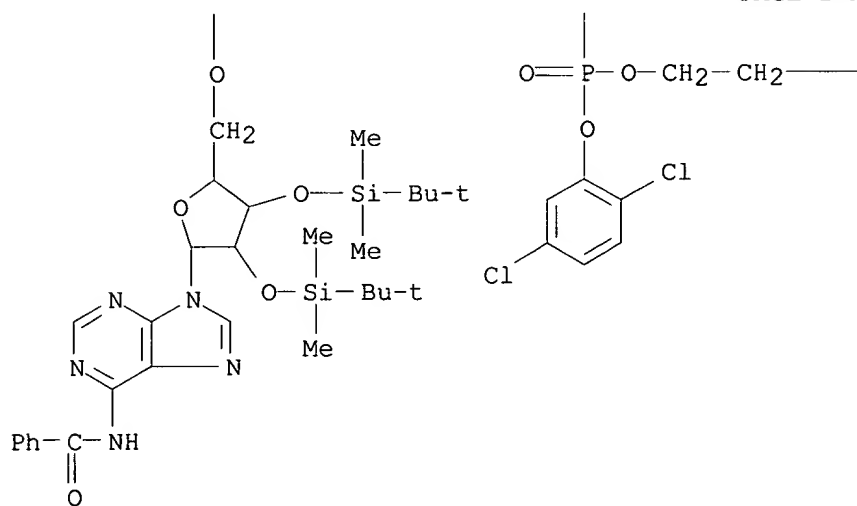
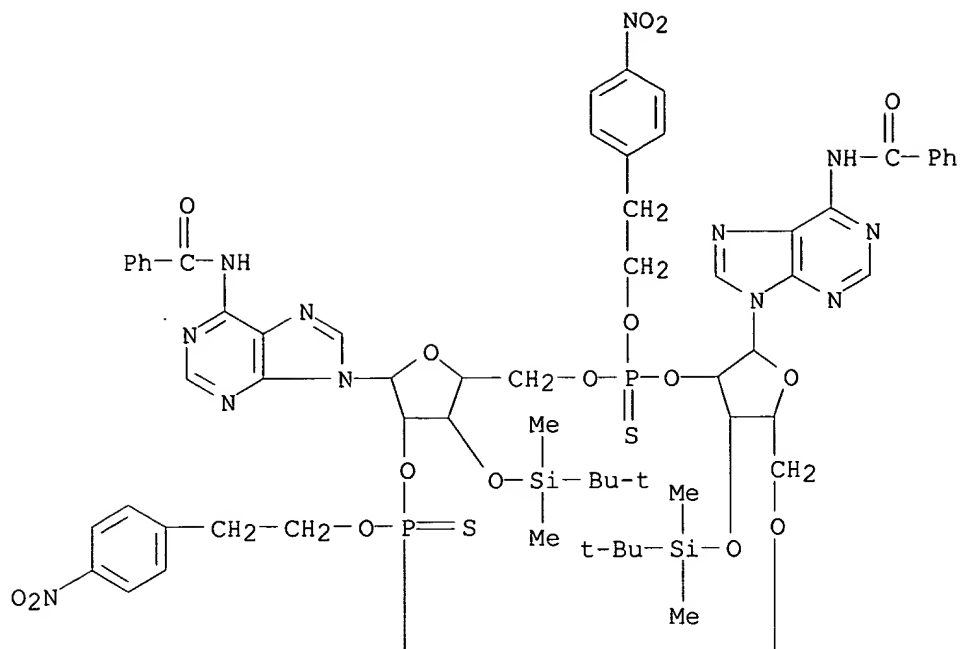
PAGE 1-A





RN 110416-00-7 USPATFULL

CN Adenosine, [P(S)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(S)]-N-benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)



TITLE: Guanine derivatives
 INVENTOR(S): Ogilvie, Kelvin K., Candiac, Canada
 PATENT ASSIGNEE(S): Syntex (U.S.A.) Inc., Palo Alto, CA, United States
 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5157120		19921020
APPLICATION INFO.:	US 1981-302790		19810916 (6)
DISCLAIMER DATE:	19990831		
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1980-187631, filed on 16 Sep 1980, now patented, Pat. No. US 4347360		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Rizzo, Nicholas S.		
LEGAL REPRESENTATIVE:	Wong, James J., Lowin, David A.		
NUMBER OF CLAIMS:	2		
EXEMPLARY CLAIM:	1		
LINE COUNT:	562		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleoside analogues having a ring-open structure, of general formula: ##STR1## where R and R' may be hydrogen, silyl groups, substituted alkyl groups, benzyl groups and the like, and X is an optionally substituted base such as guanine or adenine, have been shown to exhibit anti-viral and other biological activities at non-toxic levels.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

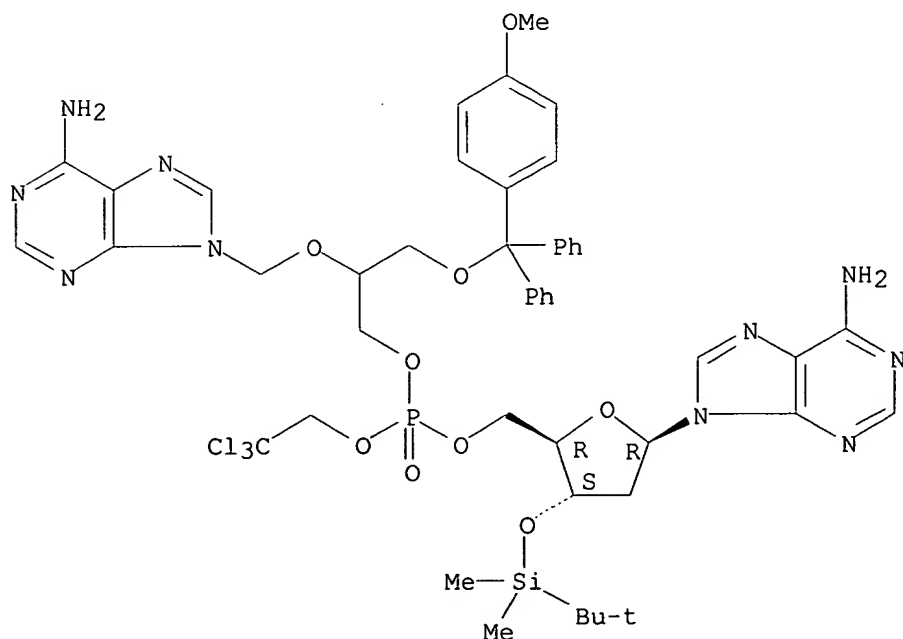
IT 82410-21-7P 82443-77-4P

(prepn. of)

RN 82410-21-7 USPATFULL

CN 5'-Adenylic acid, 2'-deoxy-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-, 2-[(6-amino-9H-purin-9-yl)methoxy]-3-[(4-methoxyphenyl)diphenylmethoxy]propyl 2,2,2-trichloroethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

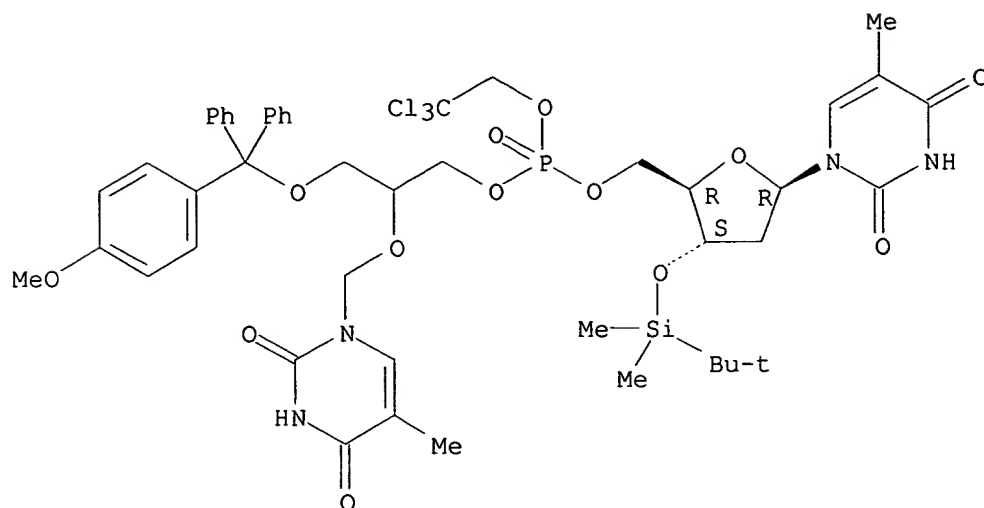


RN 82443-77-4 USPATFULL

CN 5'-Thymidylic acid, 3'-O-[(1,1-dimethylethyl)dimethylsilyl]-, 2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)methoxy]-3-[(4-

methoxyphenyl)diphenylmethoxy]propyl 2,2,2-trichloroethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 170 OF 177 USPATFULL on STN
ACCESSION NUMBER: 91:50608 USPATFULL
TITLE: Phosphoramidite compounds and process for production thereof
INVENTOR(S): Nojiri, Ryuji, Aichi, Japan
Hayakawa, Yoshihiro, Ichinomiya, Japan
Uchiyama, Mamoru, Kawasaki, Japan
Kato, Hisatoyo, Ohbu, Japan
Chino, Yasuyoshi, Tokyo, Japan
Tahara, Shinichiro, Yokohama, Japan
PATENT ASSIGNEE(S): Nippon Zeon Co., Ltd., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5026838		19910625
APPLICATION INFO.:	US 1988-229773		19880804 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1986-909728, filed on 22 Sep 1986, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1985-211240	19850925
	JP 1985-223138	19851007
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Brown, Johnnie R.	
ASSISTANT EXAMINER:	Crane, L. Eric	
LEGAL REPRESENTATIVE:	Sherman & Shalloway	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	
LINE COUNT:	855	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Phosphoramidite compounds of the general formula ##STR1## wherein each of R.sub.1 and R.sub.2 represents a hydroxyl group having a protective group, or the group --OR.sub.4, R.sub.3 represents a hydrogen atom, a hydroxyl group having a protective group, or the group --OR.sub.4, R.sub.4 represents the group ##STR2## X represents a secondary amino

group, R.sub.5 represents an allylic residue or a protective group capable of being split off by beta-cleavage, and B.sup.AOC represents a nucleoside base residue in which the amino or imino group is protected with an allyloxycarbonyl-type residue, with the proviso that only one of R.sub.1, R.sub.2 and R.sub.3 represents the group--OR.sub.4. The compounds can be produced by reacting a nucleoside represented by the general formula ##STR3## wherein each of R.sub.1 ' and R.sub.2 ' represents a hydroxyl group which may have a protective group, R.sub.3 ' represents a hydrogen atom, or a hydroxyl group which may have a protective group, and B.sup.AOC is as defined, with the proviso that only one of R.sub.1 ', R.sub.2 ' and R.sub.3 ' is a hydroxyl group,

with a phosphoramidate compound represented by the general formula ##STR4## wherein X and R.sub.5 are as defined, and Y represents a secondary amino group or a halogen atom.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 108554-84-3P 108554-90-1P 108574-06-7P

108691-17-4P

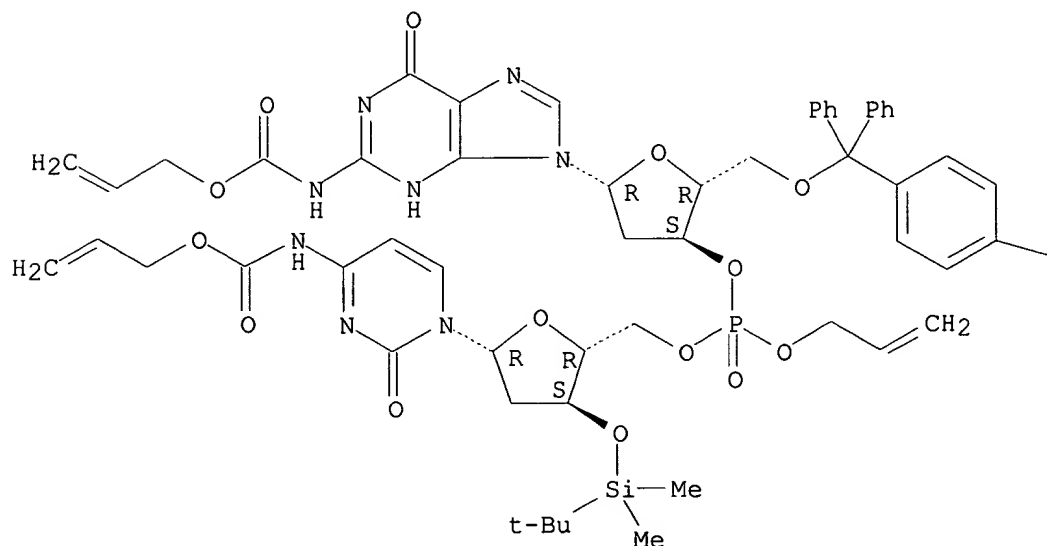
(prepn. and deprotection of)

RN 108554-84-3 USPATFULL

CN Cytidine, 2'-deoxy-5'-O-[(4-methoxyphenyl)diphenylmethyl]-P-2-propenyl-N-[(2-propenyloxy)carbonyl]guanylyl-(3'.fwdarw.5')-2'-deoxy-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-N-[(2-propenyloxy)carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



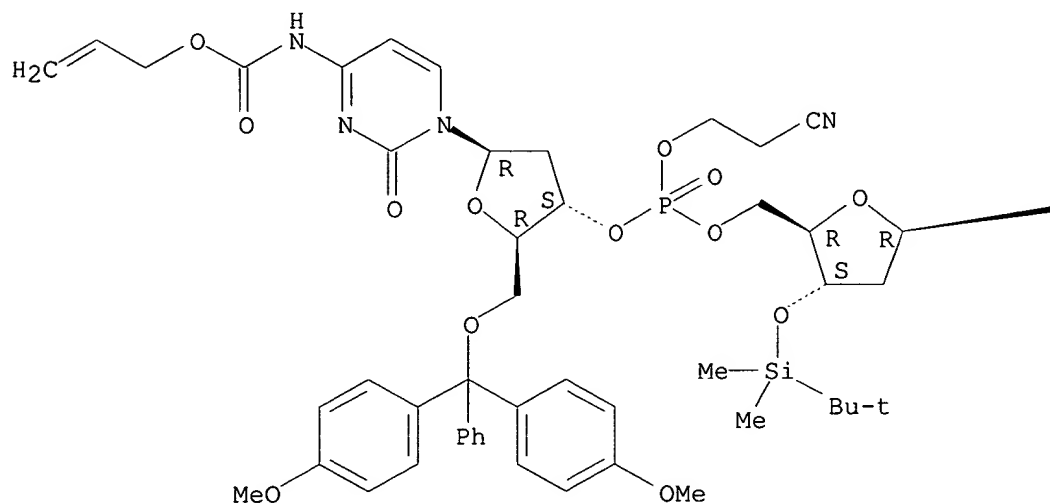
—OMe

RN 108554-90-1 USPATFULL

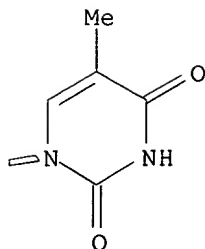
CN Thymidine, 5'-O-[bis(4-methoxyphenyl)phenylmethyl]-P-(2-cyanoethyl)-2'-deoxy-N-[(2-propenyloxy)carbonyl]cytidyl-yl-(3'. fwdarw.5')-3'-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



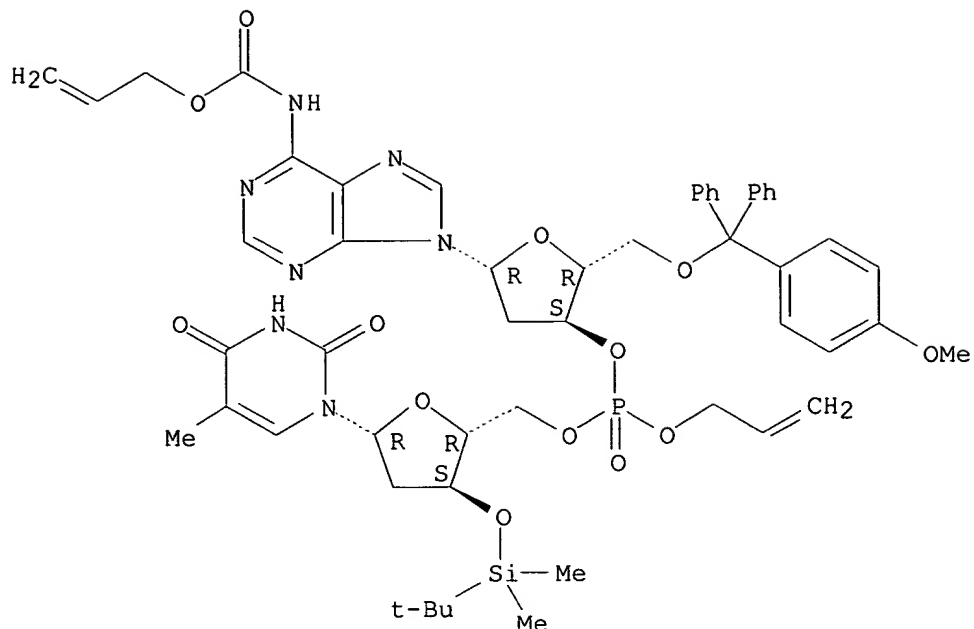
PAGE 1-B



RN 108574-06-7 USPATFULL

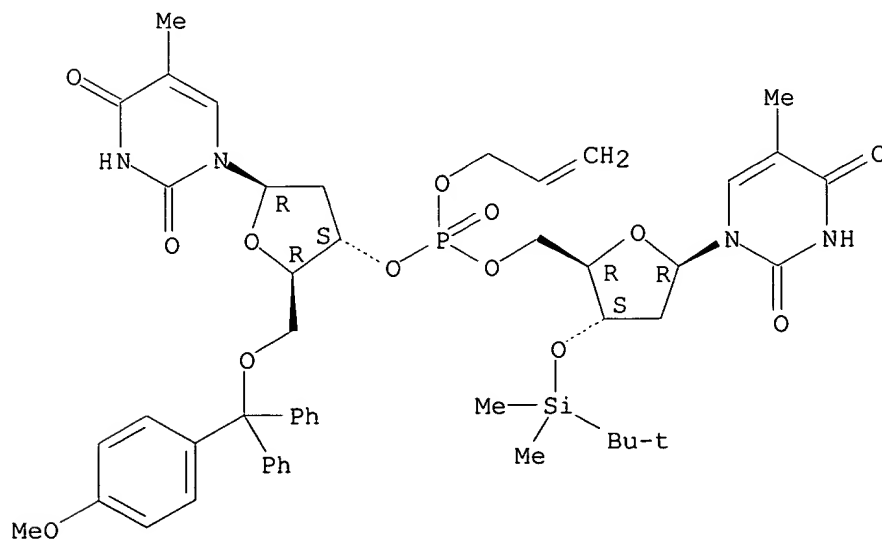
Thymidine, 2'-deoxy-5'-O-[(4-methoxyphenyl)diphenylmethyl]-P-2-propenyl-N-
[(2-propenyloxy)carbonyl]adenyl-yl-(3'. fwdarw.5')-3'-O-[(1,1-
dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 108691-17-4 USPATFULL
 CN Thymidine, 5'-O-[(4-methoxyphenyl)diphenylmethyl]-P-2-propenylthymidylyl-(3'.fwdarw.5')-3'-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)

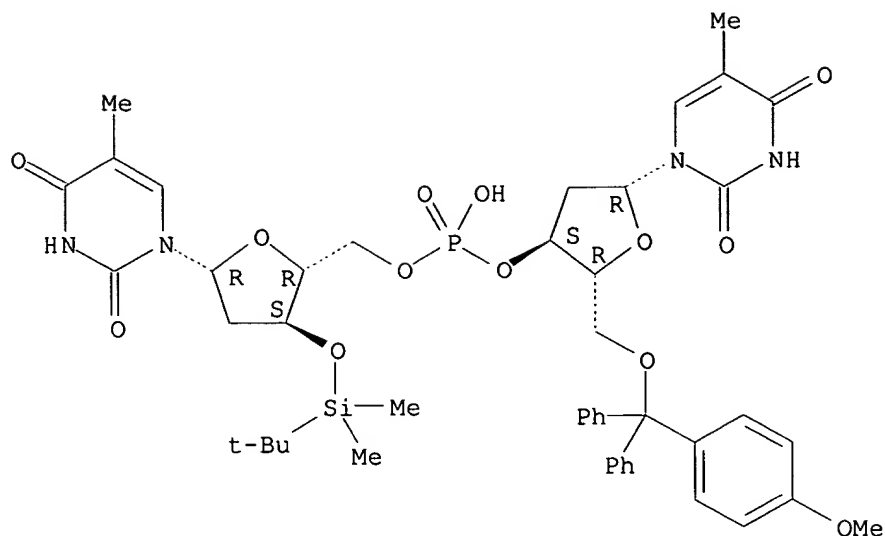
Absolute stereochemistry.



IT 74724-64-4P 108554-82-1P 108554-85-4P
 108554-91-2P
 (prepn. of)

RN 74724-64-4 USPATFULL
 CN Thymidine, 5'-O-[(4-methoxyphenyl)diphenylmethyl]thymidylyl-(3'.fwdarw.5')-3'-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)

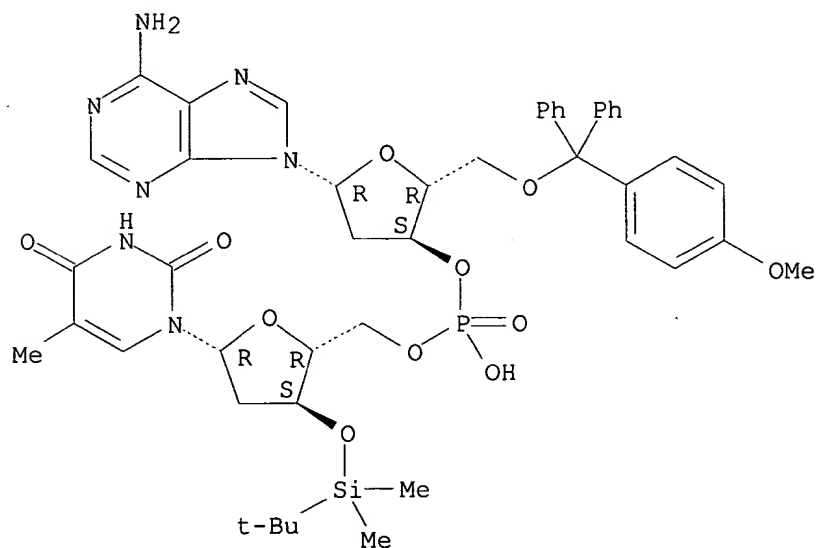
Absolute stereochemistry.



RN 108554-82-1 USPATFULL

CN Thymidine, 2'-deoxy-5'-O-[(4-methoxyphenyl)diphenylmethyl]adenylyl-
(3'.fwdarw.5')-3'-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.



RN 108554-85-4 USPATFULL

CN Cytidine, 2'-deoxy-5'-O-[(4-methoxyphenyl)diphenylmethyl]guanylyl-
(3'.fwdarw.5')-2'-deoxy-3'-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4924624		19900515
APPLICATION INFO.:	US 1987-112591		19871022 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Griffin, Ronald W.
ASSISTANT EXAMINER: Crane, L. Eric
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1,22
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1487

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Optically active compounds of the formula ##STR1## wherein n is 1 or 2 and m is 0, 1, 2 or 3 have antiviral activity. Compounds of the formula wherein at least one of the internucleotide phosphorothioate linkages is of the Sp configuration possess increased antiviral activity and/or metabolic stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

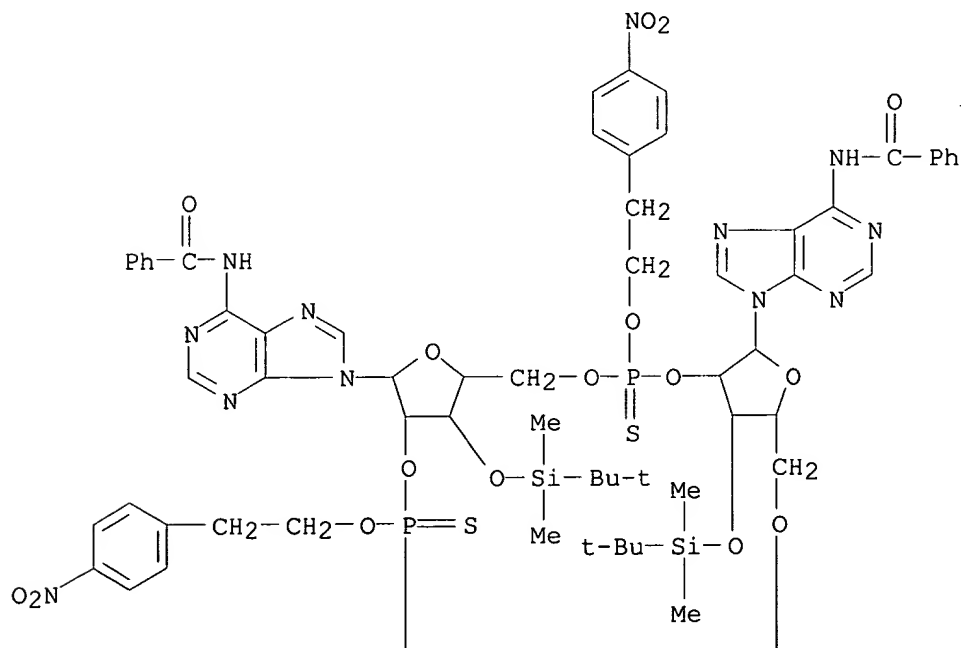
IT 110356-00-8P 110415-98-0P 110415-99-1P
110416-00-7P

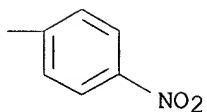
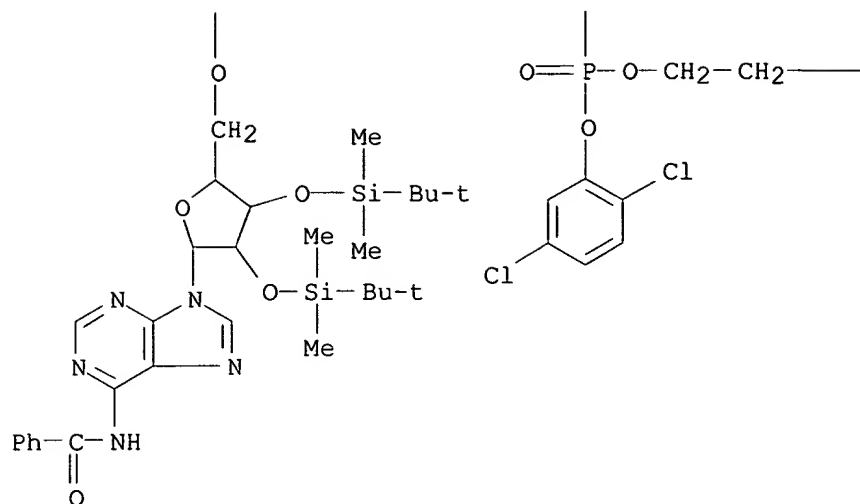
(prepn. of, as virucide)

RN 110356-00-8 USPATFULL

CN Adenosine, [P(R)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(R)]-N-benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)

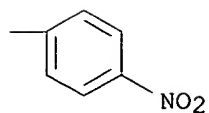
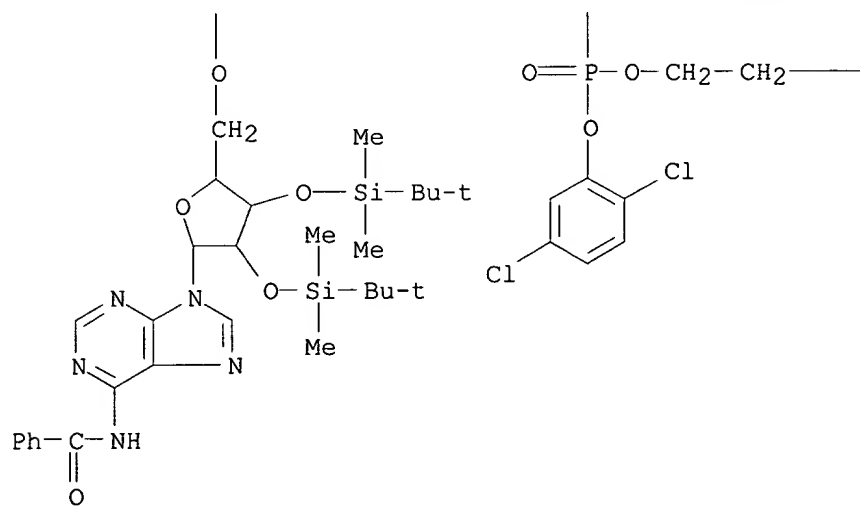
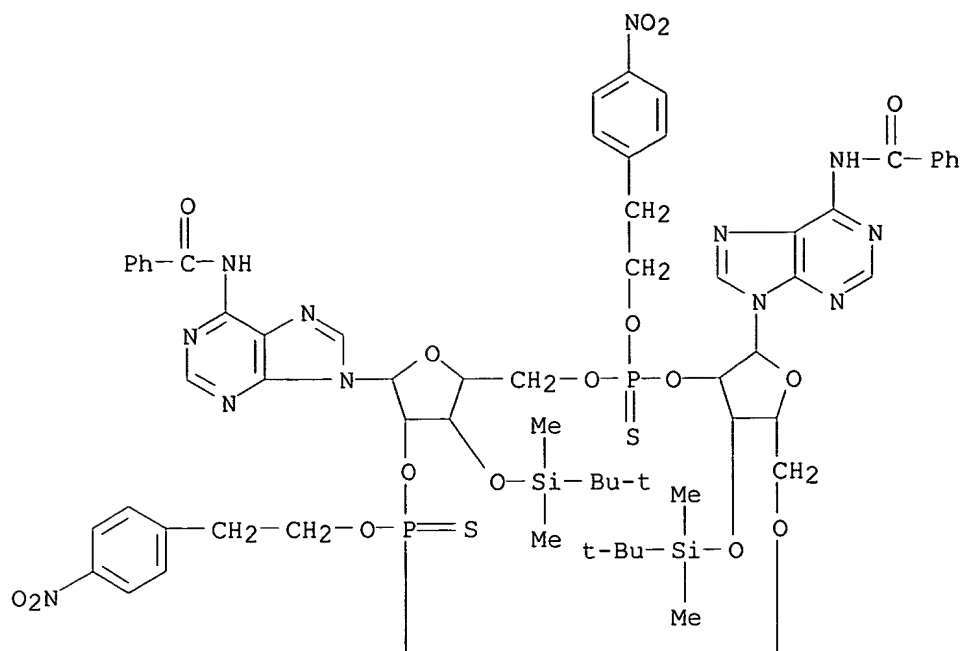
PAGE 1-A





RN 110415-98-0 USPATFULL

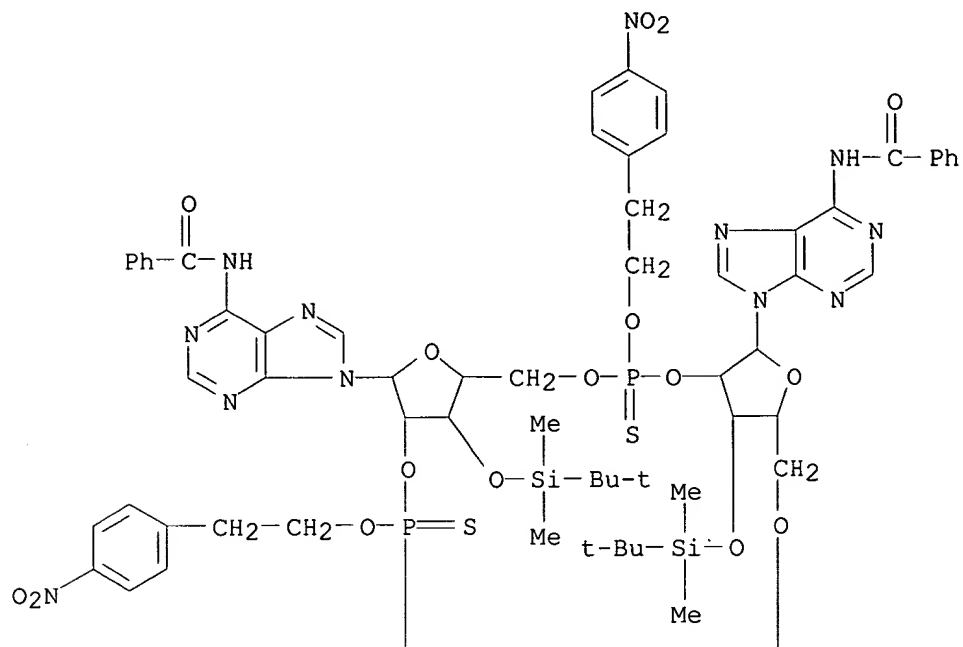
CN Adenosine, [P(S)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(R)]-N-benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)



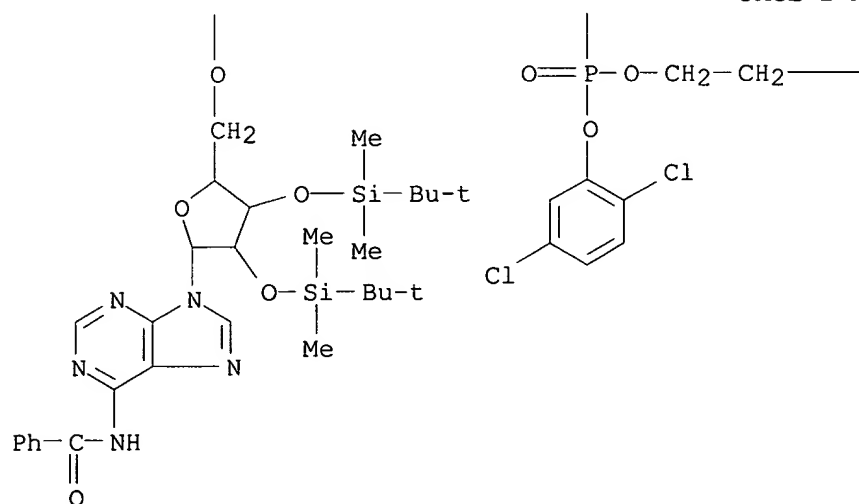
RN 110415-99-1 USPATFULL
 CN Adenosine, [P(R)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-

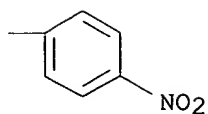
P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(S)]-N-benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A





RN 110416-00-7 USPATFULL

CN Adenosine, [P(S)]-N-benzoyl-5'-O-[(2,5-dichlorophenoxy)[2-(4-nitrophenyl)ethoxy]phosphinyl]-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-[P(S)]-N-benzoyl-3'-O-[(1,1-dimethylethyl)dimethylsilyl]-P(O)-[2-(4-nitrophenyl)ethyl]-P-thioadenylyl-(2'.fwdarw.5')-N-benzoyl-2',3'-bis-O-[(1,1-dimethylethyl)dimethylsilyl]- (9CI) (CA INDEX NAME)

